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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/075,670 | 02/13/2002 | Peter Eisele | A-3172 | 2676 |

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EXAMINER

POPOVICI, DOV

ART UNIT PAPER NUMBER

2625

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/075,670 | Applicant(s) EISELE, PETER | |
| | Examiner Dov Popovici | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006 and 23 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

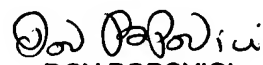
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


DOV POPOVICI
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/28/2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Notredame et al (U.S. 6,049,390).

As to claim 1, Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit, comprising: at least one raster processor (RIP system 1009) for generating raster data from raw image data; and a memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of

memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); said raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, the raster data is arranged column by column).

As to claim 4, Notredame et al. discloses an image setting unit (1019) and a DMA controller (131; see column 15, lines 1-4) for controlling a transfer of the raster data from the raster memory (130; 1011, 1013) to the image-setting unit (1019, 123).

As to claim 5, Notredame et al. discloses a buffer memory (130; 1011, 1013); the DMA controller (131) providing an output; the buffer memory (130; 1011, 1013) buffering the output of the DMA controller (131).

As to claim 7, Notredame et al. discloses a method of processing raster data for an image-setting unit of a printing machine (see figure 10, printing device 1019), which comprises: generating raster data (generating raster data in the RIP system 1009) line by line from raw image data; storing the raster data column by column (see column 35, lines 50-52, the raster data is arranged column by column) in a raster memory (1011,1013) with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43); while being generated by a raster processor; and reading out the raster data column by column into an image-setting unit (see figure 10).

As to claim 8, Notredame et al. discloses using a DMA controller (131; see column 15, lines 1-4) to control the step of reading out the raster data; and buffering the raster data that has been read out in a buffer memory (130; 1011, 1013).

As to claim 9, Notredame et al. discloses wherein the raster data are generated line by line from the raw image data; (see column 35, lines 51-64, note that raster data are generated line by line reads on the raster data is arranged row by row).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notredame et al (U.S. 6,049,390) in view of Agarwal (U.S. Patent Application Publication. Pub. No. US 2001/0022815).

As to claim 2, Notredame et al. teaches a raster memory and a raster processor. However, Notredame et al. does not teach a first plug-in interface board, the raster memory and the raster processor disposed on the first plug-in interface board.

Agarwal teaches a pixel processor and a memory device contained in a single plug-in board.

Therefore, it would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. wherein: the raster memory and the raster processor are disposed on the plug-in interface board.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. by the teaching of Agarwal wherein the raster memory and the raster processor are disposed on the plug-in interface board, so that if the memory and/or the processor needs repair and/or replacement, the technician could easily replace and/or remove the plug-in board.

As to claim 3, Notredame et al. as modified discloses an image setting unit (1019) and a DMA controller (131; see column 15, lines 1-4) for controlling a transfer of the raster data from the raster memory (130; 1011, 1013) to the image-setting unit (1019, 123).

As to claim 6, Notredame et al. teaches a DMA controller and a buffer memory. However, Notredame et al. does not teach a second plug-in interface board, the DMA controller and the buffer memory disposed on the second plug-in interface board.

Agarwal teaches a converter, capture processor, pixel processor, bus, bus interface and memory device are contained in a single plug-in board.

Therefore, it would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. wherein: the DMA controller and the buffer memory are disposed on the plug-in interface board.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Notredame et al. by the teaching of

Agarwal wherein the DMA controller and the buffer memory are disposed on the plug-in interface board, so that if the memory and/or the controller needs repair and/or replacement, the technician could easily replace and/or remove the plug-in board.

Response to Arguments

Applicant's arguments filed 6/23/2006 have been fully considered but they are not persuasive.

With respect to Applicant argument that "Notredame does not disclose a raster generating process" and "the data are already in the post ripped state and the cited paragraph does not disclose how the page elements have to be rastered and ripped or how the data are stored when the raster data are generated" (Applicant argument on page 7, of the amendment filed 6/23/06), the argument has been fully considered but is not found to be persuasive. Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit. Notredame et al discloses a raster processor (RIP system 1009) for generating raster data from raw image data; see column 10, lines 65+, where Notredame discloses that RIP 1009 generates three separate raster images. Furthermore, Notredame et al discloses a memory (1003, 1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, and 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43). The raster processor storing the raster data column

by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, wherein the raster data is arranged column by column).

With respect to Applicant argument that “the new feature of storing raster data column by column while being generated is clearly part of the raster data generating process and not of any post ripping process”, the argument has been fully considered but is not found to be persuasive. Notredame et al. discloses storing raster data column by column (column 35, lines 50+) while the raster data are being generated (column 10, lines 65+).

With respect to Applicant argument that “Notredame discloses a printing device, but it is silent about reading out raster data column by column into an image setting unit. The paragraph does not disclose that the raster data being generated in the RIP are stored while being generated column by column. Notredame is silent on the raster data generation process” and “storing the raster data column by column in a raster memory with random access while being generated by the raster processor, as recited in claims 1 and 7”, the argument has been fully considered but is not found to be persuasive. Notredame et al. discloses a raster generation system (see figure 10) for a printing machine (1019) with an image-setting unit. Notredame et al discloses a raster processor (RIP system 1009) for generating raster data from raw image data; see column 10, lines 65+, where Notredame discloses that RIP 1009 generates three separate raster images. Furthermore, Notredame et al discloses a memory (1003,

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1011, 1013) for storing the raster data while the raster data are being generated by the raster processor (RIP system 1009), said memory formed by a raster memory with random access (Note that page element cache 1011 comprises a chunk of memory in memory 130, and 130 is a main random access memory; see column 14, line 63 and column 22, lines 42-43). The raster processor storing the raster data column by column in said raster memory while the raster data are being generated (see column 35, lines 50-52, wherein the raster data is arranged column by column).

With respect to Applicant argument that "Agarwal is silent as to the raster data creation process and does not disclose storing raster data column by column in a raster data memory while the raster data are being generated." the argument has been fully considered but is not found to be persuasive, because Agarwal is cited to teach a pixel processor and a memory device contained in a single plug-in board, and Agarwal is relied upon to teach a converter, capture processor, pixel processor, bus, bus interface and memory device are contained in a single plug-in board.

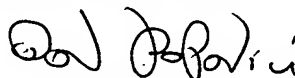
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dov Popovici whose telephone number is 571-272-4083. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dov Popovici
Primary Examiner
Art Unit 2625